

Appl. No. 09/926,018
Amendment dated: October 24, 2003
Reply to OA of: June 27, 2003

REMARKS

Applicants acknowledge with appreciation the allowance of claims 1-19.

Applicants have amended the claims to more particularly define the invention taking into consideration the outstanding Official Action. Claims 20 and 21 have been amended, claims 21-27 have been canceled from the application without prejudice or disclaimer and new claims 28-34 have been added to more particularly define the obtained precipitate and include as a limitation the standard deviation for the mean particle size as fully supported on page 12 , line 25 through 31 of Applicants' specification.

Claims 31-34 have been limited to metal oxide powders having a mean particle size in the range of 2 to 5 nm with a geometric standard deviation less than or equal to 1.1, which cannot be manufactured with any known process. It is further to be noted that the novelty of the claimed agglomerated nanocrystalline powder also implies the novelty of its utilities as claimed in claim 34. Applicants most respectfully submit that all the claims now present in the application are in full compliance with 35 U.S.C. §112 and are clearly patentable over the references of record.

Applicants note the Examiner's objection to the disclosure because the Examiner believes that the word "oxidant" as used in the specification and in claim 1 on line 10 is in error. However, Applicants most respectfully submit that the word "oxidant" is correct. This term is conventionally used to designate an oxidizing agent, as confirmed by the definition given in the New Oxford Dictionary of English (Britannica CD 2000 Deluxe Edition):

oxidant *noun* an oxidizing agent.

-ORIGIN late 19th cent.: from French (modern French *oxydant*), present participle of *oxyder* 'oxidize'.

Claim 1 recites that the oxidant is capable of oxidizing the metal to a higher cationic oxidation state. In other words, as recited in the claim, the oxidant acts as an oxidizing agent, which corresponds to the Dictionary's definition. Accordingly, Applicants

Appl. No. 09/926,018
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submit that the term "oxidant" is correctly used in claim 1 and should therefore be maintained in the claim and the objection withdrawn.

The rejection of claims 20 and 21 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been carefully considered. However, in view of the amendment to correct the dependence of these claims from depending on claim 17 to depending on claim 18 which recites the hydrothermal treatment, it is believed that this amendment obviates the rejection thereto and accordingly, it is most respectfully requested that the rejection to claims 20 and 21 be withdrawn.

The rejection of claims 22-23 and 26 under 35 U.S.C. 102(b) as being anticipated by Kasai et al. or Pirzada et al. has been carefully considered. However, the cancellation of claims 22-23 and 26 obviates this rejection and it is therefore, most respectfully requested that this rejection be withdrawn.

Applicants wish to direct the Examiner's attention to MPEP § 2131 which states that to anticipate a claim, the reference must teach every element of the claim.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed.Cir. 1990).

Applicants most respectfully submit that new claims 31-34 have been limited to metal oxide powders having a mean particle size in the range of 2 to 5 nm with a geometric standard deviation less than or equal to 1.1, which cannot be manufactured with any known process. These are claim limitations which cannot be ignored and must be considered in evaluating the novelty of the claimed invention over the prior art. It is

Appl. No. 09/926,018
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further to be noted that the novelty of the claimed agglomerated nanocrystalline powder also implies the novelty of its utilities as claimed in claim 34.

The rejection of claims 22 and 23 under 35 U.S.C. 103(a) as being unpatentable over McCandlish et al. has been carefully considered but is most respectfully traversed in view of the cancellation of these claims. Accordingly, it is most respectfully requested that this rejection be withdrawn.

The rejection of claims 22-27 under 35 U.S.C. 103(a) as being unpatentable over Kasai et al. or Hanawa et al. or Pirzada et al. has been carefully considered but is most respectfully traversed. Claims 22-27 have been canceled and it is therefore, most respectfully requested that this rejection be withdrawn.

Applicants also most respectfully submit that the corresponding product claims added to the application are not rendered prima facie obvious by the above references either alone or in combination. In this regard, Applicants wish to direct the Examiner's attention to the basic requirements of a prima facie case of obviousness as set forth in the MPEP § 2143. This section states that to establish a prima facie case of obviousness, three basic criteria first must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Section 2143.03 states that all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an

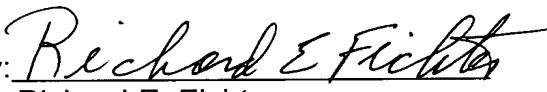
Appl. No. 09/926,018
Amendment dated: October 24, 2003
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independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants most respectfully submit that new claims 31-34 have been limited to metal oxide powders having a mean particle size in the range of 2 to 5 nm with a geometric standard deviation less than or equal to 1.1, which cannot be manufactured with any known process. Thus, even if the necessary motivation is found in the prior art to make the metal oxide powders, there is no known process for making them. Accordingly, it is most respectfully submitted that the newly added claims are patentable over the prior art and the obviousness rejections should not be applied to the newly added claims.

In view of the above comments and further amendments to the claims, favorable reconsideration and allowance of all of the claims now present in the application are most respectfully requested.

Respectfully submitted,
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